

**CERTIFICATE OF REGISTRATION OF PESTICIDE/VECTOR
REPELLENT**

**ISSUED UNDER SECTION 8 OF THE CONTROL OF VECTORS AND PESTICIDES
ACT 1998**

Registration Number : SINNEAI-MicEW/012/0364

This is to certify that

Name of Registrant : RENTOKIL INITIAL SINGAPORE PRIVATE
LIMITED

Address of Principal : 16 & 18 JALAN MESIN
Place of Business : SINGAPORE 368815

Company/Business Certificate No : 195900145N

**has been granted registration of the following pesticide for advertisement, sale
and supply in Singapore.**

Product Name : PYGO

Active Ingredient : D-PHENOTHRIN

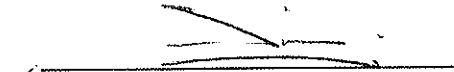
Content : D-PHENOTHRIN 10.00% W/W

Formulation : MICRO EMULSION

Manufacturer : RENTOKIL INITIAL PLC
FELCOURT
EAST GRINSTEAD, WEST SUSSEX
RH19 2JY
UNITED KINGDOM

The Certificate of Registration is issued subject to the conditions stated overleaf.

4 January 2005
Date of Registration


Director General of Public Health
Registration Authority

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : PYGO
 Brand : RENTOKIL
 Type of product : Biocide
 Registration No HSE 7078, PCS 93937
 Product form : Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture : Insecticide for professional use against crawling insects.
 Industrial/Professional use spec : For professional use only
 Use of the substance/mixture : Insecticide

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Rentokil Initial Supplies
 Liverpool
 L33 7SR
 UK

Product advice line: +44 (0)151 548 5050

Email: sds@rentokil.com

1.4. Emergency telephone number

Emergency number : +44 (0)1342 833022

Country	Organisation/Company	Address	Emergency number
IRELAND (REPUBLIC OF)	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road Dublin 9	+353 1 809 2166 (public, 8am - 10pm, 7/7)
UNITED KINGDOM	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road Birmingham B18 7QH	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Aquatic Acute 1 H400

Aquatic Chronic 1 H410

Full text of H-statements: see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

N; R50/53

R66

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS09

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP) :

P101 - If medical advice is needed, have product container or label at hand
 P102 - Keep out of reach of children
 P273 - Avoid release to the environment
 P391 - Collect spillage
 P501 - Dispose of contents/container to an approved waste disposal plant

EUH-statements :

EUH066 - Repeated exposure may cause skin dryness or cracking

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
d-Phenothrin	(CAS No) 188023-86-1 (EC no) 247-404-5	10	N; R50/53
Hydrocarbons, C9, aromatics	(EC no) 918-668-5	2.5 - 5	R10 Xi; R37 Xn; R65 R66 R67 N; R51/53
1,3,5-trimethylbenzene	(CAS No) 108-67-8 (EC no) 203-604-4 (EC index no) 601-025-00-5	0.1 - 1	R10 Xi; R37 N; R51/53
Cumene substance with a Community workplace exposure limit	(CAS No) 98-82-8 (EC no) 202-704-5 (EC index no) 601-024-00-X	0.01 - 0.1	R10 Xn; R65 Xi; R37 N; R51/53
Ethylbenzene substance with a Community workplace exposure limit	(CAS No) 100-41-4 (EC no) 202-849-4 (EC index no) 601-023-00-4	0.01 - 0.1	F; R11 Xn; R20 Xn; R65 Xn; R48/20
Toluene substance with a Community workplace exposure limit	(CAS No) 108-88-3 (EC no) 203-625-9 (EC index no) 601-021-00-3	< 0.01	F; R11 Repr.Cat.3; R63 Xn; R65 Xn; R48/20 Xi; R38 R67

Name	Product identifier	Specific concentration limits
1,3,5-trimethylbenzene	(CAS No) 108-67-8 (EC no) 203-604-4 (EC index no) 601-025-00-5	(C >= 25) Xi;R37

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
d-Phenothrin	(CAS No) 188023-86-1 (EC no) 247-404-5	10	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Hydrocarbons, C9, aromatics	(EC no) 918-668-5	2.5 - 5	Flam. Liq. 3, H226 STOT SE 3, H336 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,3,5-trimethylbenzene	(CAS No) 108-67-8 (EC no) 203-604-4 (EC index no) 601-025-00-5	0.1 - 1	Flam. Liq. 3, H226 STOT SE 3, H335 Aquatic Chronic 2, H411
Cumene substance with a Community workplace exposure limit	(CAS No) 98-82-8 (EC no) 202-704-5 (EC index no) 601-024-00-X	0.01 - 0.1	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H335 Aquatic Chronic 2, H411
Ethylbenzene substance with a Community workplace exposure limit	(CAS No) 100-41-4 (EC no) 202-849-4 (EC index no) 601-023-00-4	0.01 - 0.1	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 STOT RE 2, H373 Asp. Tox. 1, H304
Toluene substance with a Community workplace exposure limit	(CAS No) 108-88-3 (EC no) 203-625-9 (EC index no) 601-021-00-3	< 0.01	Flam. Liq. 2, H225 Repr. 2, H361d Asp. Tox. 1, H304 STOT RE 2, H373 Skin Irrit. 2, H315 STOT SE 3, H336

Name	Product identifier	Specific concentration limits
1,3,5-trimethylbenzene	(CAS No) 108-67-8 (EC no) 203-604-4 (EC index no) 601-025-00-5	(C >= 25) STOT SE 3, H335

Full text of R- and H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Allow breathing of fresh air. Allow the victim to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Reactivity in case of fire : Thermal decomposition generates toxic vapours.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Place in an appropriate container and dispose of the contaminated material at a licensed site.

6.4. Reference to other sections

See Heading 8. Exposure controls/personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place. Keep away from food, drink and animal feedingstuffs.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

Insecticide.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

1,3,5-trimethylbenzene (108-67-8)		
EU	Local name	Mesitylene (Trimethylbenzenes)
EU	IOELV TWA (mg/m ³)	100 mg/m ³
EU	IOELV TWA (ppm)	20 ppm
Ireland	Local name	Mesitylene (also 1,3,5 trimethylbenzene)
Ireland	OEL (8 hours ref) (mg/m ³)	100 mg/m ³
Ireland	OEL (8 hours ref) (ppm)	20 ppm
Ireland	Notes (IE)	IOELV
Ethylbenzene (100-41-4)		
EU	Local name	Ethylbenzene
EU	IOELV TWA (mg/m ³)	442 mg/m ³
EU	IOELV TWA (ppm)	100 ppm
EU	IOELV STEL (mg/m ³)	884 mg/m ³
EU	IOELV STEL (ppm)	200 ppm
EU	Notes	Skin
Ireland	Local name	Ethylbenzene
Ireland	OEL (8 hours ref) (mg/m ³)	442 mg/m ³
Ireland	OEL (8 hours ref) (ppm)	100 ppm
Ireland	OEL (15 min ref) (mg/m ³)	884 mg/m ³
Ireland	OEL (15 min ref) (ppm)	200 ppm
Ireland	Notes (IE)	Sk, IOELV
United Kingdom	Local name	Ethylbenzene
United Kingdom	WEL TWA (mg/m ³)	441 mg/m ³
United Kingdom	WEL TWA (ppm)	100 ppm
United Kingdom	WEL STEL (mg/m ³)	552 mg/m ³
United Kingdom	WEL STEL (ppm)	125 ppm
United Kingdom	Remark (WEL)	Sk
Toluene (108-88-3)		
EU	Local name	Toluène
EU	IOELV TWA (mg/m ³)	192 mg/m ³
EU	IOELV TWA (ppm)	50 ppm
EU	IOELV STEL (mg/m ³)	384 mg/m ³
EU	IOELV STEL (ppm)	100 ppm
EU	Notes	Peau
Ireland	Local name	Toluene
Ireland	OEL (8 hours ref) (mg/m ³)	192 mg/m ³
Ireland	OEL (8 hours ref) (ppm)	50 ppm
Ireland	OEL (15 min ref) (mg/m ³)	384 mg/m ³
Ireland	OEL (15 min ref) (ppm)	100 ppm

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Toluene (108-88-3)		
Ireland	Notes (IE)	Sk, IOELV
United Kingdom	Local name	Toulene
United Kingdom	WEL TWA (mg/m ³)	191 mg/m ³
United Kingdom	WEL TWA (ppm)	50 ppm
United Kingdom	WEL STEL (mg/m ³)	384 mg/m ³
United Kingdom	WEL STEL (ppm)	100 ppm
United Kingdom	Remark (WEL)	Sk
Cumene (98-82-8)		
EU	Local name	Cumene
EU	IOELV TWA (mg/m ³)	100 mg/m ³
EU	IOELV TWA (ppm)	20 ppm
EU	IOELV STEL (mg/m ³)	250 mg/m ³
EU	IOELV STEL (ppm)	50 ppm
EU	Notes	Skin
Ireland	Local name	Isopropyl benzene
Ireland	OEL (8 hours ref) (mg/m ³)	100 mg/m ³
Ireland	OEL (8 hours ref) (ppm)	20 ppm
Ireland	OEL (15 min ref) (mg/m ³)	250 mg/m ³
Ireland	OEL (15 min ref) (ppm)	50 ppm
Ireland	Notes (IE)	Sk, IOELV
United Kingdom	Local name	Cumene
United Kingdom	WEL TWA (mg/m ³)	125 mg/m ³
United Kingdom	WEL TWA (ppm)	25 ppm
United Kingdom	WEL STEL (mg/m ³)	250 mg/m ³
United Kingdom	WEL STEL (ppm)	50 ppm
United Kingdom	Remark (WEL)	Sk

8.2. Exposure controls

Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: characteristic.
Odour threshold	: No data available
pH	: 8.4
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 180 °C
Flash point	: 69 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1
Solubility	: completely miscible.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

Explosive properties : No data available
 Oxidising properties : No data available
 Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

d-Phenothrin (188023-86-1)	
LD50 oral rat	5000 mg/kg
LD50 dermal	≥ 2000 g/kg
LC50 inhalation rat (mg/l)	≥ 2.1 mg/l/4h
Ethylbenzene (100-41-4)	
ATE CLP (gases)	4500.000 ppmv/4h
ATE CLP (vapours)	11.000 mg/l/4h
ATE CLP (dust,mist)	1.500 mg/l/4h

Skin corrosion/irritation : Not classified
 Based on available data, the classification criteria are not met
 pH: 8.4

Serious eye damage/irritation : Not classified
 Based on available data, the classification criteria are not met
 pH: 8.4

Respiratory or skin sensitisation : Not classified
 Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified
 Based on available data, the classification criteria are not met

Carcinogenicity : Not classified
 Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified
 Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified
 Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated exposure) : Not classified
 Based on available data, the classification criteria are not met

Aspiration hazard : Not classified
 Based on available data, the classification criteria are not met

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

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d-Phenothrin (188023-86-1)	
LC50 fish 1	2.7 µg/l
EC50 Daphnia 1	4.3 µg/l

12.2. Persistence and degradability

PYGO	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

PYGO	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

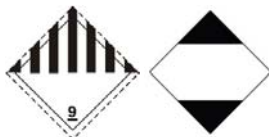
UN-No. (ADR) : 3082
UN-No. (IATA) : 3082
UN-No. (IMDG) : 3082

14.2. UN proper shipping name

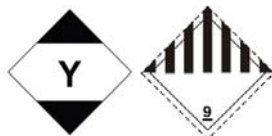
Proper Shipping Name (ADR) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document description (ADR) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((contains d-phenothrin)), 9, III, (E)

14.3. Transport hazard class(es)

Class (ADR) : 9
Classification code (ADR) : M6
Class (IATA) : 9
Class (IMDG) : 9
Danger labels (ADR) : 9,



Hazard labels (IATA) : 9



Danger labels (IMDG) : 9,



14.4. Packing group

Packing group (ADR) : III
Packing group (IMDG) : III

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14.5. Environmental hazards

Dangerous for the environment : Yes
Marine pollutant : Yes

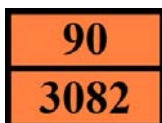


Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 90
Classification code (ADR) : M6
Orange plates :



Special provisions (ADR) : 274, 335, 601
Transport category (ADR) : 3
Tunnel restriction code (ADR) : E
Limited quantities (ADR) : 5I
Excepted quantities (ADR) : E1
EAC code : •3Z

14.6.2. Transport by sea

Special provisions (IMDG) : 274, 335
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : P001, LP01
Special packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP2, TP29
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-F
Stowage category (IMDG) : A

14.6.3. Air transport

No additional information available

14.6.4. Inland waterway transport

Carriage prohibited (ADN) : No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Other information	: None.

Full text of R-, H- and EUH-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H361d	Suspected of damaging the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
EUH066	Repeated exposure may cause skin dryness or cracking
R10	Flammable
R11	Highly flammable
R20	Harmful by inhalation
R37	Irritating to respiratory system
R38	Irritating to skin
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R63	Possible risk of harm to the unborn child
R65	Harmful: may cause lung damage if swallowed
R66	Repeated exposure may cause skin dryness or cracking
R67	Vapours may cause drowsiness and dizziness
F	Highly flammable
N	Dangerous for the environment
Xi	Irritant
Xn	Harmful

RI - SDS EU (REACH Annex II)

Before using any product, ensure that you read and understand its label.

The information contained in this safety data sheet is, to the best of our knowledge and belief, accurate and reliable at the time of publication. The information relates only to the specific material designated in this safety data sheet and may not be valid for such material if it is used in combination with any other material(s) or any other use than that specified herein. Neither Rentokil Initial plc nor any of its subsidiaries accepts any liability for the use of this product for any other purpose than that described in this safety data sheet. This does not affect your statutory rights. It is the user's responsibility to satisfy him/herself as to the suitability in completeness of such information for his/her own particular use.

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